

## 1.0 Sample Analysis Authorizations and Analysis Requests

One of ECL's primary roles is to analyze samples collected by DTSC field staff. If ECL doesn't have the capability to do a specific analysis, or to analyze samples within the time requested, ECL will arrange for a Contract Laboratory to do the analysis. The Contract Laboratory will be accredited by the National Environmental Laboratory Accreditation Program (NELAP). ECL will coordinate analysis with the Contract Laboratory and perform a quality assurance review of the completed laboratory report, and if needed the data package.

The ECL Sample Management Officer (SMO) will be the main point of contact on matters regarding sample analysis between DTSC programs and ECL, and between DTSC and the Contract Laboratories. The SMO, calling on resources throughout ECL, can help the field staff ("Requestor") develop a Sampling and Analysis Plan. The SMO can assist with the selection of analytical methods, sample containers, preservatives, and the amount of sample required for the analyses requested. The SMO will survey available laboratory resources, and direct samples to one or more laboratories that have the ability to complete the analysis within the holding times stipulated in the method, and within the turn around time required by the Requestor.

There are four turnaround time (TAT) levels. The quickest is TAT 1, 15 days or less between sample arrival and the laboratory report. TAT 1 requires approval of the Unit Chief. In an emergency, sample analysis can be expedited. The program Branch Chief should contact the ECL Chief directly.

ECL can also accommodate non-routine analysis requests and conduct special projects.

Contact the Research Scientist Supervisor or the ECL Chief directly.

The procedures for obtaining approval for sample analysis and for submitting samples are detailed in this Appendix. The next two sections describe the information and sample flow, and specifically the two forms (ARF and SAR) that serve to initiate and document the sampling event and subsequent analysis. The ARF and SAR, and instructions for completing them, are on the DTSC network server so they may be readily accessed, completed and transmitted on-line.

## 2.0 Authorization Request Form (ARF) for Sample Analysis

- 2.1 At least one week before the anticipated sample collection date, the Requestor will complete Parts A and B of the electronic Authorization Request Form (e-ARF). The e-ARF Excel file and instructions for completing the form are on the DTSC shared drive forms directory T:\FORMS\ECL\ARF. The Requestor should contact the ECL Sample Management Officer (SMO) with any questions regarding the form, including the selection of analytical methods. Each sampling event requires its own ARF.
- 2.2 The ARF file is e-mailed to the ECL SMO GroupWise mailbox at: [SMOff@dtsc.ca.gov](mailto:SMOff@dtsc.ca.gov).
- 2.3 The SMO will review the ARF for completeness and, if necessary, contact the Requestor for clarification. Substantial changes will be noted as a revision in Part C of the ARF.
- 2.4 The SMO will e-mail the ARF to the appropriate ECL supervisors in Berkeley (for ARFs submitted by DTSC HQ, Region 1 or Region 2) or Los Angeles (for ARFs submitted by Region 3 or Region 4).
- 2.5 The ECL supervisors will determine if they will have the capacity (available staff and equipment) to do the requested analyses after the expected sample arrival date, and before the sample holding time prescribed for each method or the requested turn around time has lapsed.
- 2.6 The ECL supervisors will accept or reject all or part of the analyses requested. They will inform the SMO of their decision by e-mail within 24 hours.
- 2.7 If the analysis can be done in-house, the samples will be directed to the appropriate ECL (Berkeley or Los Angeles). If the capacity does not exist at ECL, the samples will be assigned to the closest DTSC contract laboratory. Samples and analyses may be divided between the two ECL laboratories, or an ECL and a contract laboratory. The SMO, in consultation with the Requestor, the ECL laboratory supervisors, and the contract laboratory project managers, will determine the optimal distribution of samples and analyses.

- 2.8. The SMO will complete Part C of the ARF, assigning an Authorization Number (AN), a laboratory to receive the samples, and the Expiration Date for the request. The AN comprises two numbers and two letters that denote the fiscal year and the assigned laboratory, respectively, and a four-digit sequential number that resets to 0001 on July 1. (For example, the first AN assigned after July 1, 2007 for samples to be analyzed at ECL-Berkeley will be 07EC0001. The code for ECL-Los Angeles will be 07SC0001.) The Requestor will enter the AN on the Sample Analysis Request (SAR) form completed at the time of sampling. The Requestor should refer to the AN when contacting the laboratories regarding the samples.
- 2.9 If samples are to be sent to two laboratories, an additional ARF will be created by copying the submitted e-ARF. The SMO will modify Part B of the two ARFs (the original and copy) so that only the samples and analyses to be done at the assigned laboratory in Part C will appear on the copy sent to that laboratory.
- 2.10 The SMO will transmit by e-mail the completed ARF(s) to the Requestor, the appropriate ECL supervisors, and the contract laboratory, as indicated.
- 2.11 The SMO will archive the ARF in electronic file format.
- 2.12 If samples and an e-SAR are not received within a week after the Expiration Date, the Requestor will receive a follow-up reminder by e-mail.

### 3.0 Sample Analysis Requests (SAR)

- 3.1 After an approved Authorization Request Form (ARF) has been received, samples may be delivered to the designated laboratory for analysis. Because of the time required to process ARFs, it is advisable to collect samples only after ARF approval is obtained and the laboratory is prepared to receive the samples. This way, unnecessary delays between sample collection and analysis that may compromise sample integrity and data quality can be avoided. In the event of an emergency or other extenuating circumstance, field staff can contact the ECL Sample Management Officer (SMO) and request expedited processing of the ARF. The number of samples, analyses requested, and sampling date should conform to the ARF. If the number of samples is 20 percent or more than

what was approved, if additional analyses are required, or if sampling will be delayed or cancelled, the Requestor should inform the SMO and submit a revised ARF.

- 3.2 During sample collection, field data should be recorded for entry on the electronic Sample Analysis Request (e-SAR) form. This information can be directly entered on a portable computer carried into the field, or recorded in a notebook or printed copy of the SAR and entered later into the e-SAR. The e-SAR (in EXCEL) and instructions for completing the form are on the DTSC shared drive forms directory T:\FORMS\ECL\SAR. Many of the fields have drop-down menus; others require the Requestor to enter the information.
- 3.3 All SARs should be e-mailed to the ECL Sample Log-in Officer (SLOff) at [SLOff@dtsc.ca.gov](mailto:SLOff@dtsc.ca.gov) so all samples, including those going to contract laboratories, can be tracked in the ECL Laboratory Information Management System (LIMS).
- 3.4 The SLOff will forward the e-SARs to ECL-Los Angeles for samples that will be delivered there.
- 3.5 The Requestor should print a copy of the completed SAR and fill in line "a" of the Chain of Custody (CoC) section of the SAR. CoC documentation must start at the time of sample collection. A copy of this signed SAR must accompany the samples to the laboratory.
- 3.6 The ECL SLOff will fill in the next line of the CoC on the SAR, acknowledging receipt of the samples, and return a copy to the Requestor.
- 3.7 If samples will be forwarded from ECL to a contract lab, a copy of the SAR with CoC will be sent with the samples.
- 3.8 If samples will be sent directly to a contract lab by the Requestor, a copy of the signed SAR with CoC should be sent with the samples. The Requestor should also e-mail the unsigned e-SAR to the SLOff. This can be done directly from the form if using a DTSC-network computer.